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Title: Corallina-2 Sidetrack 2 Drilling Programme

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Environment Plan Summary

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Signed:
Gary Jones

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Environment Plan Summary Corallina-2 Sidetrack 2 Drilling Programme

This summary of the Corallina-2 Sidetrack 2 Drilling Programme Environment Plan has been submitted to comply with Regulation 11(7)(8) of the *Petroleum (Submerged Lands) (Management of Environment) Regulations 1999*.

1. Introduction

Woodside Energy Ltd (Woodside) proposes to undertake drilling of the Corallina-2 Sidetrack 2 (ST2) production well in the AC/L5 permit area of the Boneparte Basin. The well is located in approximately 408 m of water in the Timor Sea, approximately 570 km northwest of Darwin (Figure 1).

The Environment Plan (EP) has been prepared in accordance with State and Commonwealth regulatory requirements and guidelines and also conforms to Woodside's Environmental Policy and Environment Management System. The scope of the EP covers the environmental risks and impacts associated with the proposed Corallina-2 ST2 drilling programme.

2. Description of the Action

Woodside proposes to drill the Corallina-2 ST2, from the existing Corallina-2 well, using the Ocean Bounty semi-submersible drill rig. The Ocean Bounty, which will be crewed by approximately 85 people, will be supported by two or three oilfield support vessels. The well will take approximately 70 days to drill, clean up and complete, and the programme will be undertaken during Q2 2009.

The annulus gas of the Corallina-2 well will be bullheaded into the reservoir and the existing sidetrack 1 will be plugged and have the completion removed. The ST2 will be drilled using seawater with hi-vis sweeps in the upper sections and non-water based mud (NWBM) in the lower section of the well.

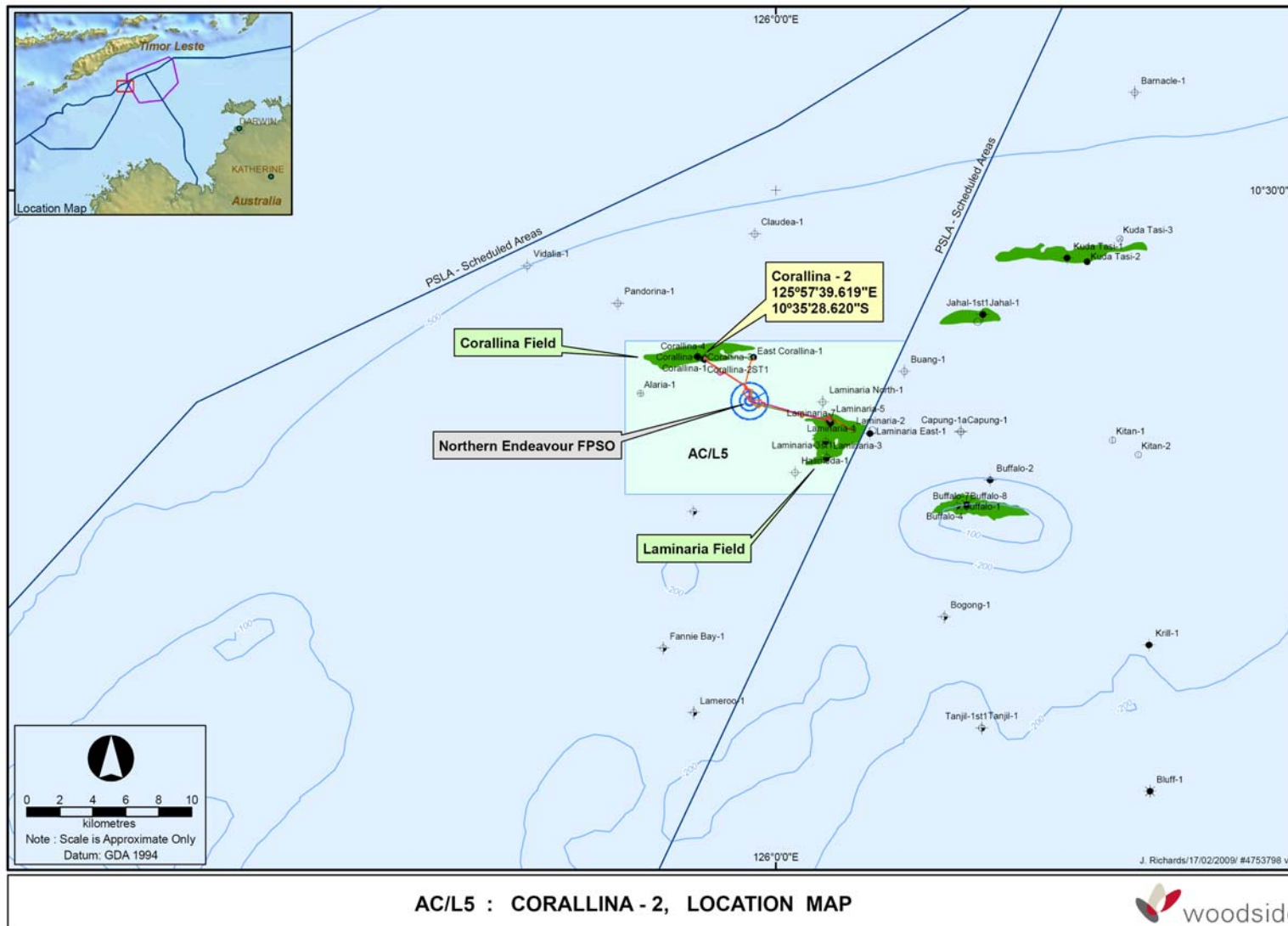
The Corallina-2 ST2 will likely be cleaned up and completed in order to enable production from the reservoir units intersected by the well bore.

3. Coordinates of Activity

The surface location coordinates for the well are: (GDA94)

Well	Water Depth (m)	Easting (Longitude)	Northing (Latitude)	Latitude	Longitude
Corallina-2 ST2	408 m	167 413.2	8 827 589.7	10°35'28.620" S	125°57'39.619" E

Figure 1: Location of Corallina-2 ST2 Production Well



4. Description of the Receiving Environment

Few significant environmental resources are expected to be located near the proposed well location. The benthic biota is likely to be characterised by a low abundance, low diversity benthic infauna dominated by polychaetes and crustaceans. There is likely to be a diverse assemblage of finfish at a generally low abundance.

The most common cetacean in the area is likely to be the spinner dolphin (*Stenella longirostris*), which is commonly observed in large groups in tropical and warm temperate waters. Other cetacean sightings in the Timor Sea can be expected to be much less frequent as few other tropical occurring species aggregate in such numbers and no migratory paths are known to occur within the area.

Five species of sea turtle nest in the region and could therefore expect to be found in Timor Sea waters either feeding or migrating between feeding and nesting grounds. These are flatback (*Natator depressus*), olive ridely (*Lepidochelys olivacea*), hawksbill (*Eretmochelys imbricata*), green (*Chelonia mydas*) and leatherback (*Dermochelys coriacea*).

A variety of seabirds are expected to pass near the proposed well location or use the waters of the Timor Sea as part of their main habitat, although distributions are expected to be patchy. The most numerically abundant species in the area is likely to be the wedge-tailed shearwater (*Puffinus pacificus*).

A list of marine species expected to occur in the region, and which are protected under the EPBC Act, either as “threatened” or “marine species”, is given Table 1.

Table 1: Marine Fauna Listed Under EPBC Act That Are Likely to Occur in the Laminaria / Corallina Area.

Common name	Species name	EPBC Act status
Cetaceans		
Blue whale	<i>Balaenoptera musculus</i>	Endangered* / migratory***
Humpback whale	<i>Megaptera novaeangliae</i>	Vulnerable** migratory***
Reptiles		
Leathery turtle	<i>Dermochelys coriacea</i>	Vulnerable** / migratory***
Green turtle	<i>Chelonia mydas</i>	Vulnerable** / migratory***
Flatback turtle	<i>Nattator depressus</i>	Vulnerable** / migratory***
Fish		
Whale sharks	<i>Rhincodon typus</i>	Vulnerable* / migratory***

Note: birds have been excluded from this list

The Laminaria / Corallina areas lie within the boundary of the Western Tuna and Billfish Fishery (WTBF). Yellowfin tuna, bigeye tuna, broadbill swordfish and to a lesser extent albacore tuna, skipjack tuna and longtail tuna are the main species taken in the WTBF. Fisheries under Indonesian jurisdiction in the Laminaria / Corallina area are not actively managed and may be heavily exploited.

5. Major Environmental Hazards

An environmental risk assessment was conducted to identify potential environmental risks from activities associated with the drilling programme. The risk assessment process indicated that the potential impacts arising from the proposed Corallina-2 ST2 well can be categorised as either having a low or medium risk level. There were no impacts identified above a medium risk level.

With the environmental management measures detailed in the Environment Plan and low probability of an oil spill, Woodside regards the risk to the environment from the drilling of the Corallina-2 ST2 as low and manageable.

6. Summary of Management Approach

Woodside's environmental management strategies and procedures to be used for the drilling of the Corallina-2 ST2 well include responsibilities, training, reporting frameworks, mitigation and response activities and monitoring and auditing procedures. Commitments associated with these will be used to reduce environmental risk to As Low As Reasonably Practicable (ALARP).

The key management objectives and commitments to be applied to the Corallina-2 ST2 well are shown in Table 2. These are consistent with Woodside Corporate and project specific objectives, standards and criteria. This is not a comprehensive list of all commitments.

Table 2: Management Objectives and Commitments for the Corallina-2 ST2 Drilling Programme

Objectives	Criteria
No significant impact to seabed and benthic habitats.	<ul style="list-style-type: none"> • Drilling of one well in deep water (408 m) with habitat of relatively low biodiversity and ecological importance. • Adherence to anchoring procedures and anchor plan.
No introduction of invasive marine species	<ul style="list-style-type: none"> • Rig and vessels adhere to Australian Quarantine and Inspection Service (AQIS) Ballast Water Management Requirements and quarantine requirements.
No significant impact to marine fauna	<ul style="list-style-type: none"> • Vessels to maintain a distance of 300 m stand off distance to cetaceans. • Helicopters shall not operate lower than 1650 ft or within the horizontal radius of 500 m of a known cetacean.
No significant impact on marine environment from drilling fluids and cuttings.	<ul style="list-style-type: none"> • Use of low toxicity NWBM fluids approved by the RDPIFR. • Fluid and cuttings control equipment inspected and operating correctly prior to commencement of operations. • Oil on cuttings will be managed to a target level of less than 10%.
No significant impact on marine environment from waste water discharges	<ul style="list-style-type: none"> • Waste water discharges to meet legislative requirements. • Bunded areas that contain hydrocarbons and/or chemicals in bulk will be designed to provide the maximum practicable ability to avoid and control spills, and allow recovery of any spilled material. • Deck washdown and stormwater containing hydrocarbons and/or chemicals will be captured, and either treated before release or contained and sent ashore for treatment and disposal. • Daily inspections of the sewage treatment chlorination tanks. • Sewage contained if failure of treatment system. • Food scraps macerated to < 25 mm before disposal. • Hydrocarbons and chemicals within bunded areas with no spills permitted to enter the overboard drainage system. • Spill kits readily available with staff trained in their use.

Objectives	Criteria
No significant environmental impact from solid and hazardous wastes	<ul style="list-style-type: none"> • Wastes segregated on the rig and vessel for transport to shore. • Implementation of D&C Waste Management Plan
Minimise emissions to atmosphere	<ul style="list-style-type: none"> • Engines maintained to operate at optimum efficiency to minimise emissions. • Compliance with MARPOL 73/78 Annex VI. • Use of low sulphur fuel, where available.
No hydrocarbon or chemical spills to the marine environment.	<ul style="list-style-type: none"> • SOPEP in place for managing spills onboard the rig or vessels. • For spills to the ocean, spill response undertaken as per the Browse OSCP. • Adherence to well integrity standards and blow-out preventer in place. • Fuels, oils and chemicals stored within contained or bunded areas. • Adherence to bulk transfer procedures. • Adherence to agreed concurrent activities document - 'Interface Document for Concurrent Activities in Corallina Field (Ocean Bounty)' (Woodside, 2009).
Minimise interference with other social and commercial users	<ul style="list-style-type: none"> • 500 m safety exclusion zone around the drill rig. • Standard maritime safety/navigation procedures (lights, beacons, etc). • Consultation with local fishermen, fishing industry groups and management agencies as needed. Operations carried out in a manner that does not interfere with navigation and fishing to a greater extent than is necessary. • AusCoast warnings via AMSA.

7. Consultation

Consultation with broader stakeholders was deemed not to be required due to the small area affected, short duration of drilling and lack of sensitive environments close to the well location. Marine notices broadcast according to Standard Maritime Safety Procedures (AMSA), via the Rescue Co-ordination Centre (RCC), will be made where required.

8. Contact Details

For further information about the Corallina-2 ST2 Drilling Programme, please contact:

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